



South Coast Air Quality Management District

**Chevron El Segundo Refinery
2013 Rule 1118 Quarterly Flare Emissions**

Emission Target

| | |
|---------------------------------|----------------------------------|
| 2013 SOx Emissions Target (lbs) | Year-to-date SOx Emissions (lbs) |
| 95,160 | 57,749.10 |

Quarter I (January 1, 2013 - March 31, 2013)

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|--------------|----------------------|-----------------|-----------------|-----------------|------------------|------------------|
| | | PM-10 | NOx | ROG | CO | S as SO2 |
| LSFO | 9,134,114 | 68.5 | 1,187.40 | 63.9 | 319.7 | 7.6 |
| Coker | 13,443,730 | 120.4 | 1,709.10 | 223.1 | 1,237.10 | 19,482.30 |
| FCC | 39,932,344 | 740.8 | 3,801.90 | 2,700.10 | 15,813.40 | 37,561.90 |
| Isomax | 15,123,610 | 114 | 1,963.50 | 108.2 | 543 | 13.2 |
| Alky Flare | 8,483,238 | 72.7 | 1,031.20 | 69.2 | 358.8 | 15.8 |
| Total | 86,117,036 | 1,116.40 | 9,693.10 | 3,164.50 | 18,272.00 | 57,080.80 |

Quarter II (April 1, 2013 - June 30, 2013)

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|--------------|----------------------|-----------------|-----------------|--------------|-----------------|--------------|
| | | PM-10 | NOx | ROG | CO | S as SO2 |
| LSFO | 9,448,714 | 71.1 | 1,226.60 | 66.2 | 331.1 | 8 |
| Coker | 12,016,504 | 90.1 | 1,562.10 | 84.1 | 420.7 | 11 |
| FCC | 13,833,688 | 143.3 | 1,545.30 | 194.3 | 1,074.50 | 150.9 |
| Isomax | 13,693,830 | 106.8 | 1,758.50 | 109.8 | 562.9 | 17.3 |
| Alky Flare | 2,318,174 | 17.7 | 301.3 | 18.7 | 96.1 | 1.9 |
| Total | 51,310,910 | 429 | 6,393.80 | 473.1 | 2,485.30 | 189.1 |

Quarter III (July 1, 2013 - September 30, 2013)

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|--------------|----------------------|-----------------|-----------------|--------------|-----------------|--------------|
| | | PM-10 | NOx | ROG | CO | S as SO2 |
| LSFO | 7,882,011 | 59.4 | 1,023.47 | 56.6 | 284.1 | 97.4 |
| Coker | 11,768,549 | 88.3 | 1,529.90 | 82.4 | 411.9 | 9.9 |
| FCC | 12,296,124 | 92.8 | 1,598.00 | 90.3 | 455.5 | 133.8 |
| Isomax | 15,020,229 | 112.7 | 1,952.40 | 105.4 | 527.2 | 12.5 |
| Alky Flare | 2,394,544 | 18 | 311.3 | 16.8 | 83.8 | 2 |
| Ground Flare | 22,434,051 | 49.4 | 1,003.70 | 46 | 6,152.50 | 2.7 |
| Total | 71,795,508 | 420.6 | 7,419.00 | 397.5 | 7,915.00 | 258.3 |

Quarter IV (October 1, 2013 - December 31, 2013)

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|--------------|----------------------|-----------------|-----------------|--------------|-----------------|--------------|
| | | PM-10 | NOx | ROG | CO | S as SO2 |
| LSFO | 13,232,526 | 92.2 | 1,720.20 | 92.6 | 463.1 | 11 |
| Coker | 11,705,363 | 87.8 | 1,521.70 | 81.9 | 409.7 | 9.7 |
| FCC | 12,925,703 | 109.1 | 1,649.70 | 164.4 | 892.2 | 161.1 |
| Isomax | 16,094,345 | 126.4 | 2,063.80 | 134.1 | 691.6 | 36.5 |
| Alky Flare | 3,133,524 | 23.5 | 407.4 | 21.9 | 109.7 | 2.6 |
| Flare | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 57,091,461 | 439 | 7,362.80 | 494.9 | 2,566.30 | 220.9 |